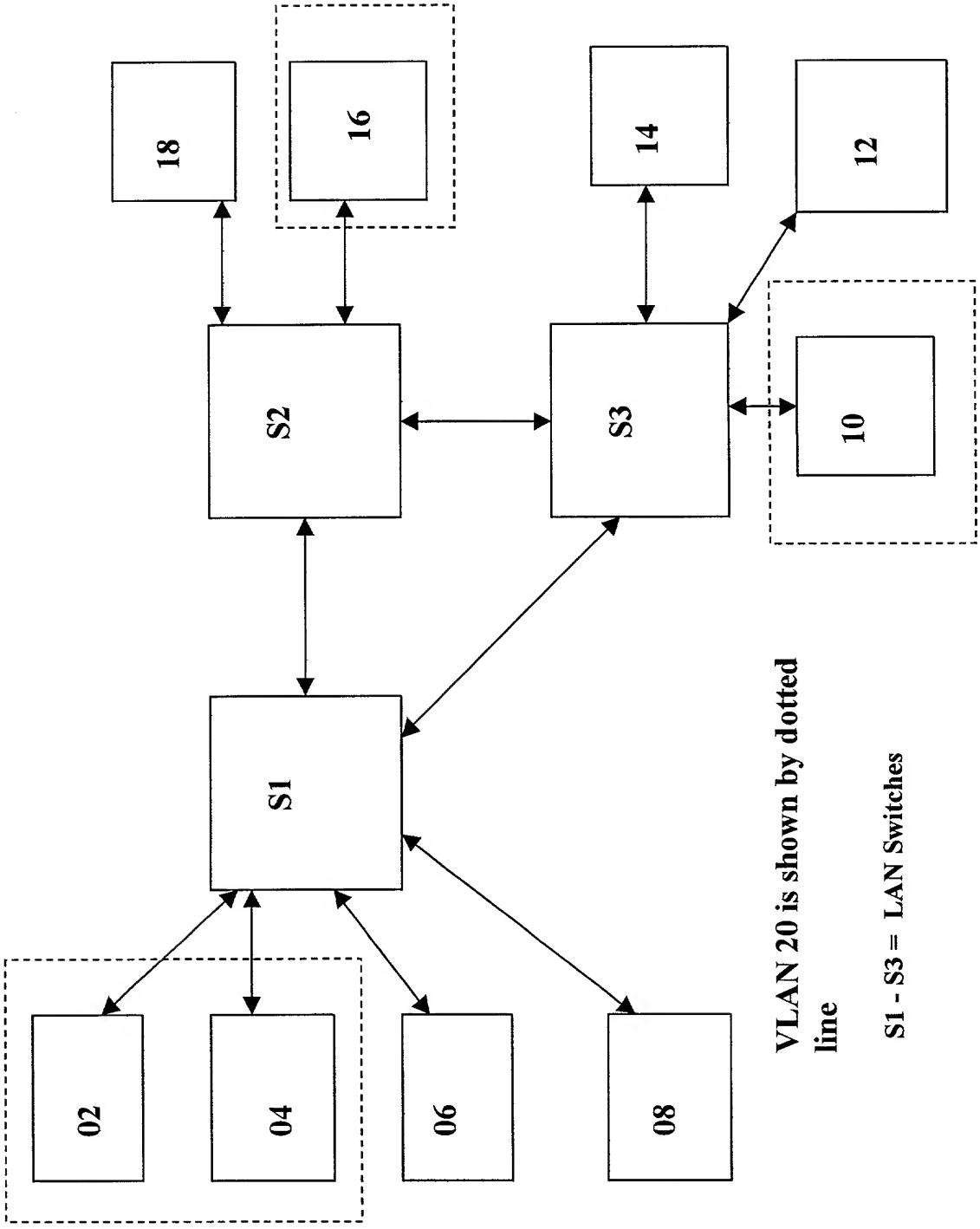


VLAN 20 is shown by dotted line

S1 - S3 = LAN Switches

Fig. 1 (Prior Art)

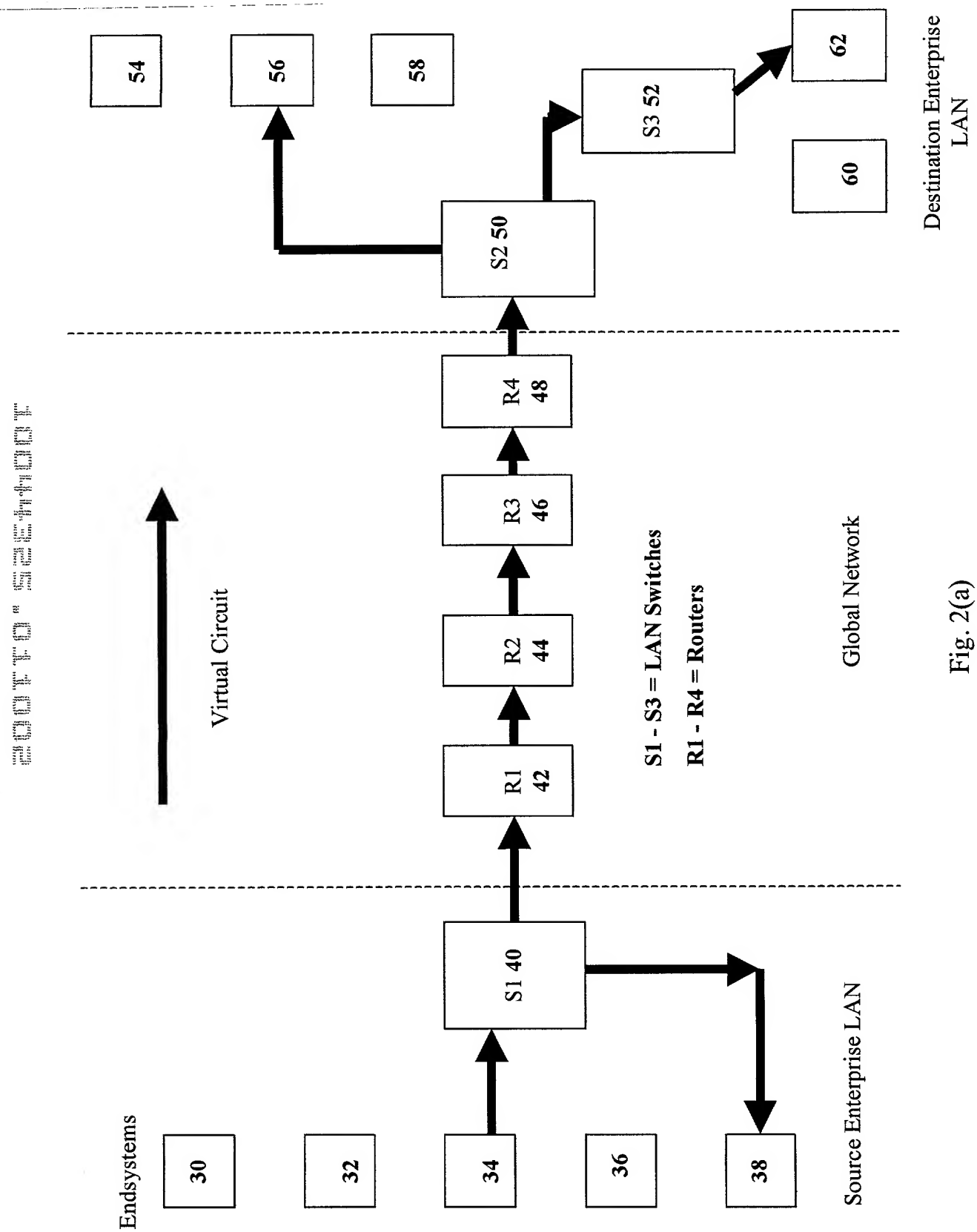

Endsystems
30
32
34
36
38
Source Enterprise LAN
S1 40
R1 42
R2 44
R3 46
R4 48
S2 50
S3 52
54
56
58
60
62
Destination Enterprise LAN
Virtual Circuit
S1 - S3 = LAN Switches
R1 - R4 = Routers
Global Network

Fig. 2(a)

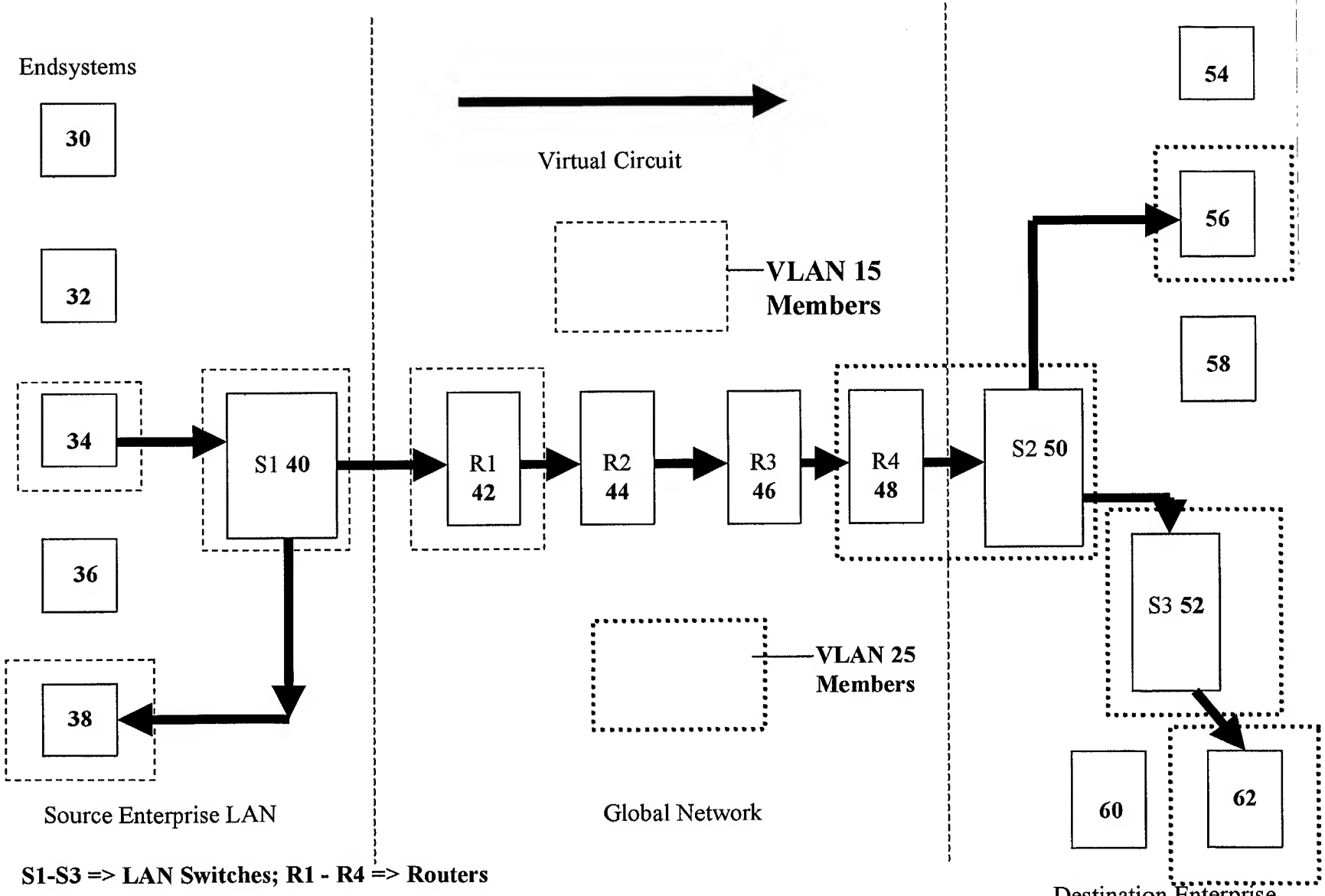

Endsystems
30
32
34
36
38
Source Enterprise LAN
Virtual Circuit
VLAN 15 Members
VLAN 25 Members
Global Network
S1 40
R1 42
R2 44
R3 46
R4 48
S2 50
S3 52
54
56
58
60
62
Destination Enterprise LAN
S1-S3 => LAN Switches; R1 - R4 => Routers

Fig. 2(b)

EPO - DG 2

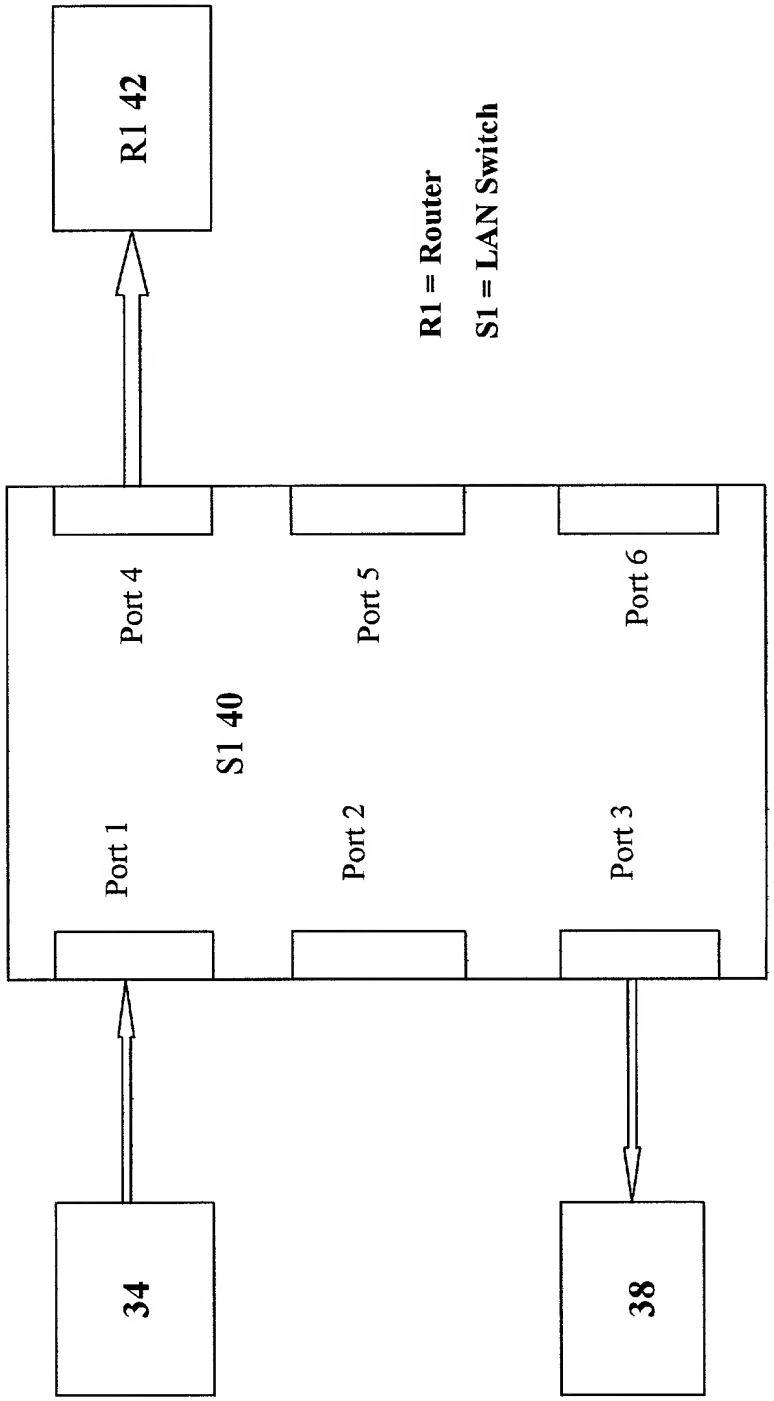

R1 42
R1 = Router
S1 = LAN Switch
Port 4
Port 5
Port 6
S1 40
Port 1
Port 2
Port 3
34
38

Fig. 3

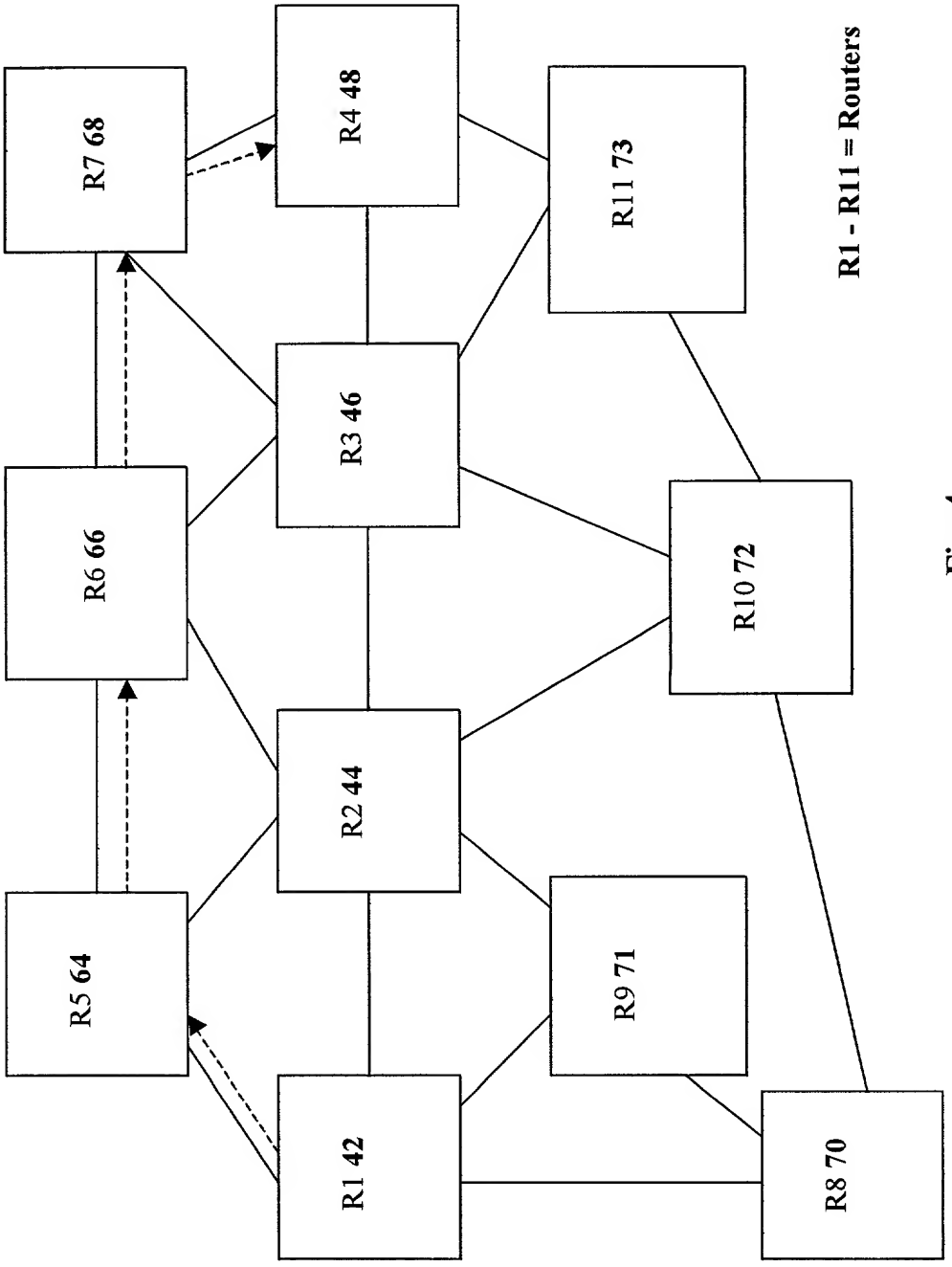

R7 68
R4 48
R11 73
R3 46
R6 66
R10 72
R2 44
R5 64
R9 71
R1 42
R8 70
R1 - R11 = Routers

Fig. 4

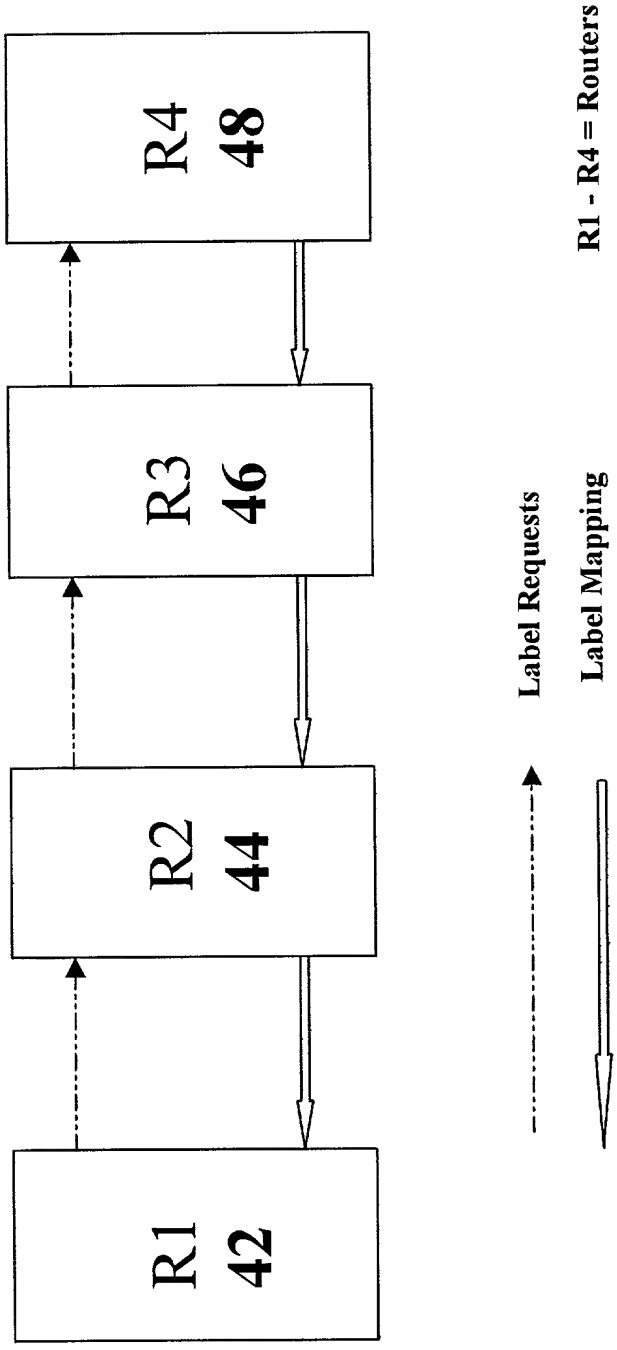
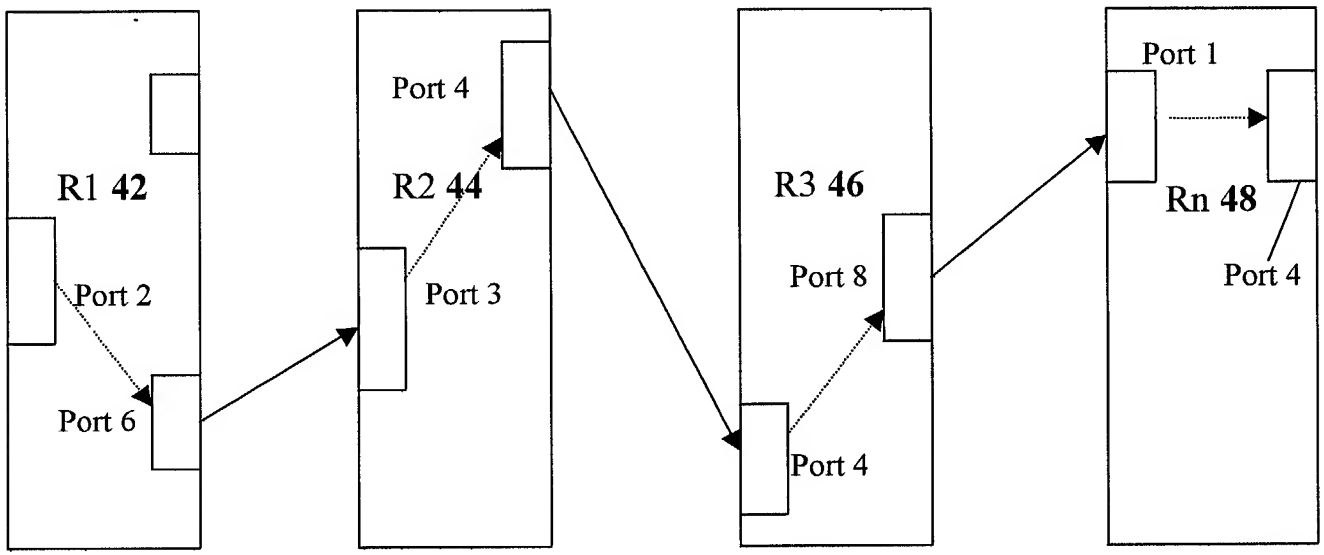

R4
48
R3
46
R2
44
R1
42
Label Requests
Label Mapping
R1 - R4 = Routers

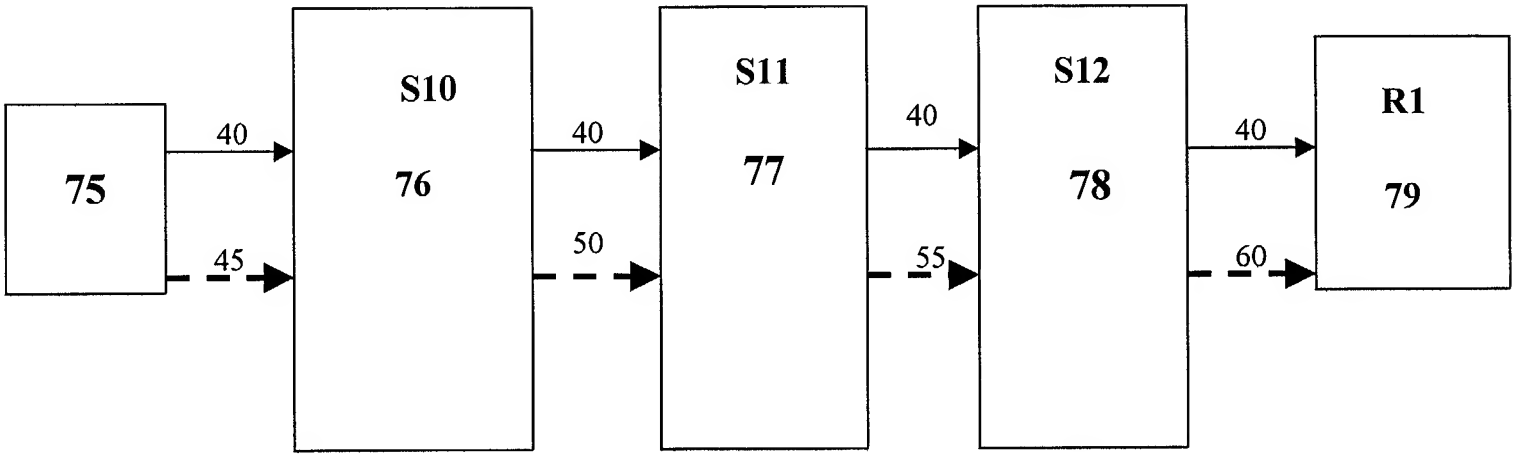
Fig. 5

R1 - R4 = Routers



Input Port	Incoming Port Label	Output Port	Outgoing Port Label
2	N/A	6	7
3	7	4	9
4	9	8	2
1	2	4	3

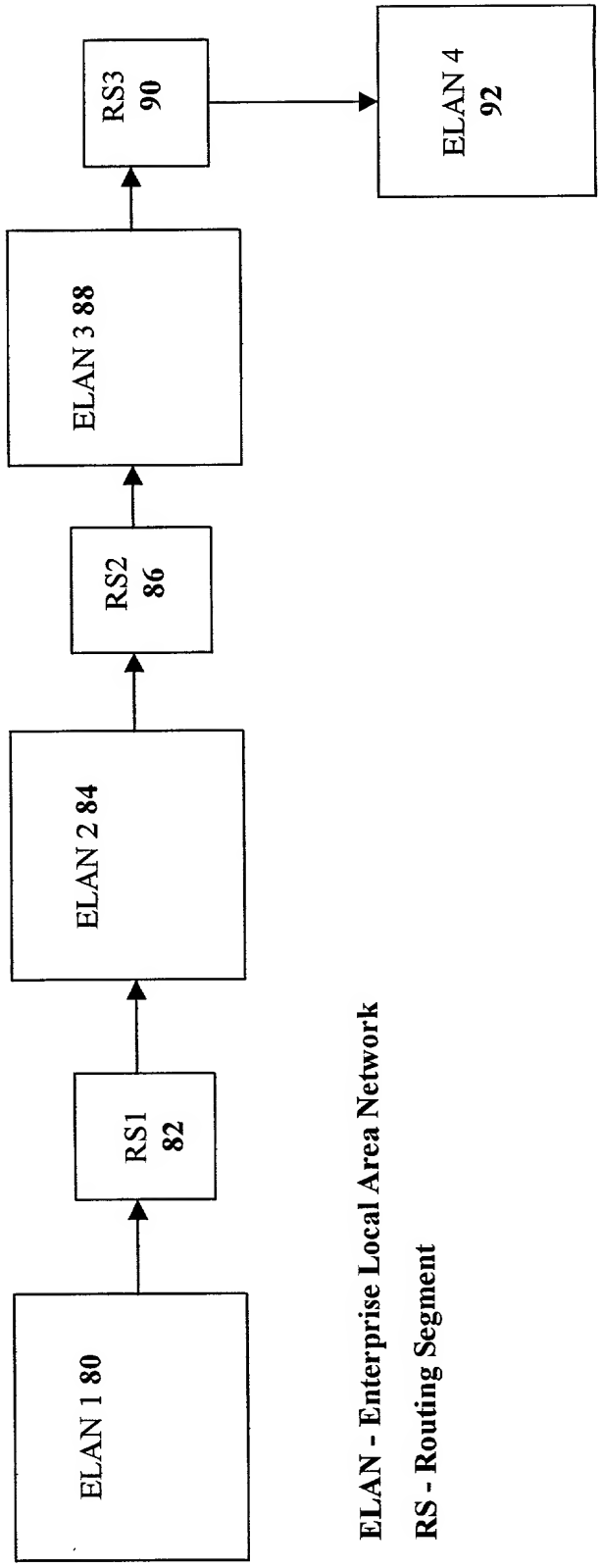
Fig. 6



S10 - S12 => LAN Switches

R1 => Router

Fig. 7



ELAN - Enterprise Local Area Network

RS - Routing Segment

Fig. 8

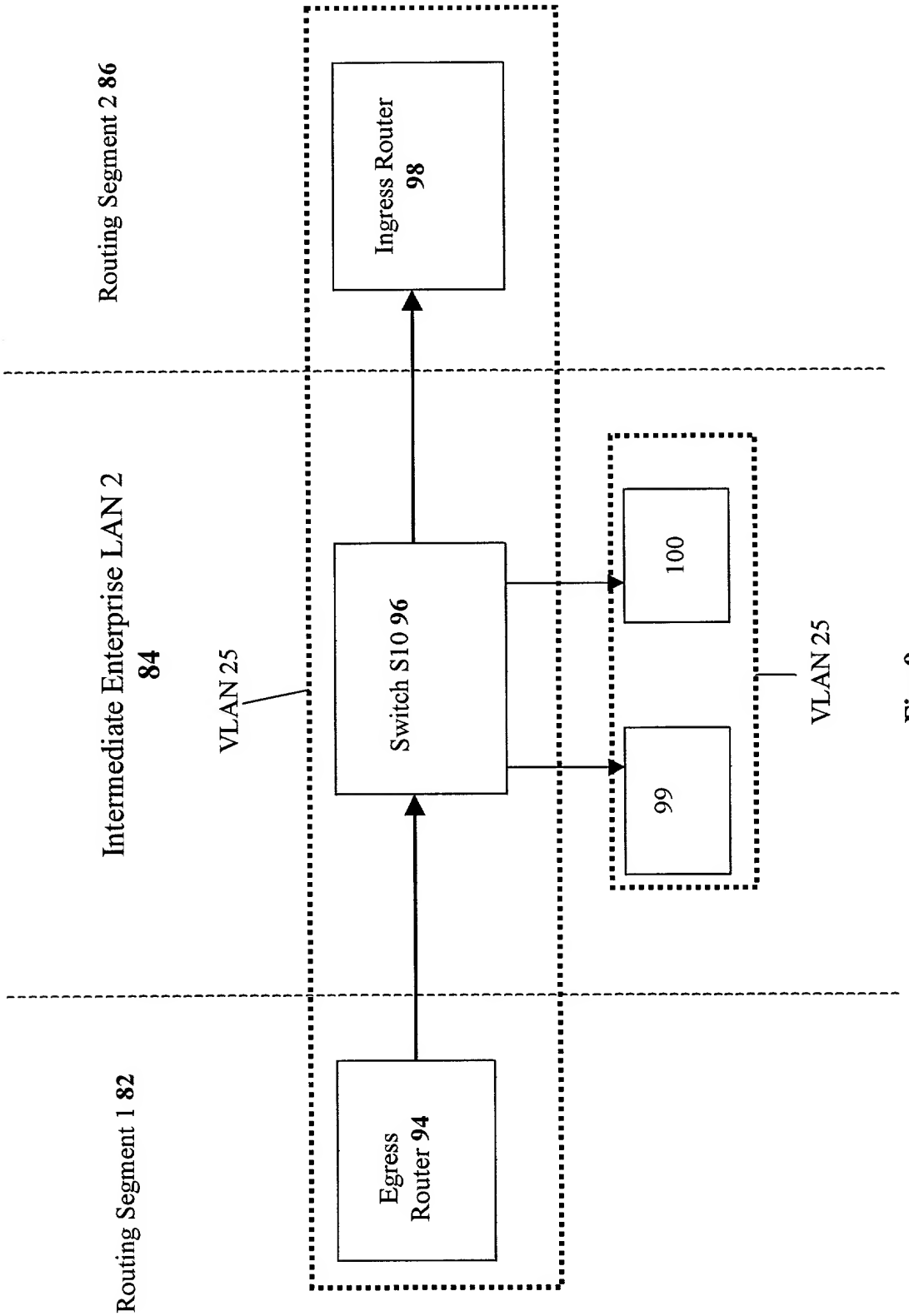

Routing Segment 2 86
Ingress Router 98
Intermediate Enterprise LAN 2 84
VLAN 25
Switch S10 96
100
99
VLAN 25
Routing Segment 1 82
Egress Router 94

Fig. 9